

AMENDMENTS TO THE CLAIMS

Claims 1 to 22 (Canceled)

23 (Currently Amended). A method comprising

identifying an aorta having an aneurysm and a neck region proximal to the aneurysm and adjacent a renal artery,

providing a first prosthesis comprising a first trunk including a fabric prosthetic material and a scaffold comprising spaced apart, mutually unattached individual main stent rings that support[s] the prosthetic material to define a lumen within the first trunk, the spaced apart, mutually unattached individual main stent rings allowing for longitudinal compliance while maintaining radial support of the lumen, the first trunk being sized and configured for placement in the neck region to provide reinforcement to the neck region, the first trunk including a proximal region, and a distal region, the prosthetic material of the proximal region and the distal region being dense to reinforce the proximal region and the distal region,

providing a second prosthesis comprising a second trunk including a fabric prosthetic material and a scaffold comprising spaced apart, mutually unattached individual main stent rings that support[s] the prosthetic material to define a lumen within the second trunk, the spaced apart, mutually unattached individual main stent rings allowing for longitudinal compliance while maintaining radial support of the lumen, the second trunk being sized and configured for placement in the aneurysm to bridge the aneurysm, the second trunk including a proximal region and a distal region,

providing a plurality of tissue-piercing fasteners,

providing an intraluminal fastener attachment assembly that can be manipulated to implant at least one of the plurality of tissue-piercing fasteners into tissue,

deploying the first prosthesis in the neck region with the proximal region placed adjacent a renal artery and the distal region placed adjacent the aneurysm,

deploying the second prosthesis in the aneurysm,

telescopically fitting the distal region of the first trunk and the proximal region of the second trunk to form a composite prosthesis, the distal region of the first trunk resisting migration of the second trunk,

manipulating the intraluminal fastener attachment assembly to implant at least one of the plurality of tissue-piercing fasteners into tissue in the neck region through the proximal region of at least one of the first trunk and the second trunk to anchor the composite prosthesis, the tissue-piercing fastener being retained in the proximal region of the at least one of the first trunk and the second trunk, and

manipulating the intraluminal fastener attachment assembly to implant another of the plurality of tissue-piercing fasteners into tissue in the neck region through the telescopically fitted distal region of the first trunk and the proximal region of the second trunk to anchor the composite prosthesis, the tissue-piercing fastener being retained in the telescopically fitted distal region of the first trunk and the proximal region of the second trunk.

Claims 24 to 27 (Canceled)

28 (Previously Presented). A method according to claim 23

wherein at least one of the plurality of tissue-piercing fasteners comprises a helical tissue-piercing fastener.

Claims 29 and 30 (Canceled).

31 (Previously Presented). A method according to claim 23

wherein at least one of the proximal and distal regions of the first trunk includes auxiliary fluoroscopic markers to fluoroscopically indicate the at least one region, and

further including fluoroscopically viewing the auxiliary fluoroscopic markers to fluoroscopically identify the at least one region.

32 (Currently Amended). A method comprising

identifying an aorta having an aneurysm and a neck region proximal to the aneurysm and adjacent a renal artery,

providing a first prosthesis comprising a first trunk including a fabric prosthetic material and a scaffold comprising spaced apart, mutually unattached individual main stent rings that support[s] the prosthetic material to define a lumen within the first trunk, the spaced apart, mutually unattached individual main stent rings allowing for longitudinal compliance while maintaining radial support of the lumen, the first trunk being sized and configured for placement in the neck region to provide reinforcement to the neck region, the first trunk including a proximal region, and a distal

region, the scaffold of the proximal region and the distal region being dense to reinforce the proximal region and the distal region,

providing a second prosthesis comprising a second trunk including a fabric prosthetic material and a scaffold comprising spaced apart, mutually unattached individual main stent rings that support[s] the prosthetic material to define a lumen within the second trunk, the spaced apart, mutually unattached individual main stent rings allowing for longitudinal compliance while maintaining radial support of the lumen, the second trunk being sized and configured for placement in the aneurysm to bridge the aneurysm, the second trunk including a proximal region and a distal region,

providing a plurality of tissue-piercing fasteners,

providing an intraluminal fastener attachment assembly that can be manipulated to implant at least one of the plurality of tissue-piercing fasteners into tissue,

deploying the first prosthesis in the neck region with the proximal region placed adjacent a renal artery and the distal region placed adjacent the aneurysm,

deploying the second prosthesis in the aneurysm,

telescopically fitting the distal region of the first trunk and the proximal region of the second trunk to form a composite prosthesis, the distal region of the first trunk resisting migration of the second trunk,

manipulating the intraluminal fastener attachment assembly to implant at least one of the plurality of tissue-piercing fasteners into tissue in the neck region through the region of at least one of the first trunk and the second trunk to anchor the composite prosthesis, the tissue-piercing fastener being retained in the proximal region of the at least one of the first trunk and the second trunk, and

manipulating the intraluminal fastener attachment assembly to implant another of the at least one of a plurality of tissue-piercing fasteners into tissue in the neck region through the telescopically fitted distal region of the first trunk and the proximal region of the second trunk to anchor the composite prosthesis, the tissue-piercing fastener being retained in the telescopically fitted distal region of the first trunk and the proximal region of the second trunk.

33 (Previously Presented). A method according to claim 32

wherein at least one of the plurality of tissue-piercing fasteners comprises a helical tissue-piercing fastener.

34 (Previously Presented). A method according to claim 32

wherein at least one of the proximal and distal regions of the first trunk includes auxiliary fluoroscopic markers to fluoroscopically indicate the at least one region, and

further including fluoroscopically viewing the auxiliary fluoroscopic markers to fluoroscopically identify the at least one region.

Claim 35 (Previously Presented). A method according to claim 23

wherein the telescopically fitting step is performed after the step of manipulating the intraluminal fastener attachment assembly to implant at least one of the plurality of tissue-piercing fasteners into tissue in the neck region through the proximal region of at least one of the first trunk and the second trunk.

Claim 36 (Previously Presented). A method according to claim 23

further including manipulating the intraluminal fastener attachment assembly to implant another of the plurality of tissue-piercing fasteners into tissue in the neck region through the distal region of the first trunk to anchor the composite prosthesis, the tissue-piercing fastener being retained in the distal region of the first trunk.

Claim 37 (Previously Presented). A method according to claim 32

wherein the telescopically fitting step is performed after the step of manipulating the intraluminal fastener attachment assembly to implant at least one of the plurality of tissue-piercing fasteners into tissue in the neck region through the proximal region of at least one of the first trunk and the second trunk.

Claim 38 (Previously Presented). A method according to claim 32

further including manipulating the intraluminal fastener attachment assembly to implant another of the plurality of tissue-piercing fasteners into tissue in the neck region through the distal region of the first trunk to anchor the composite prosthesis, the tissue-piercing fastener being retained in the distal region of the first trunk.